

844.



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,729	08/03/2001	Steven Kiyoshi Yoshinaga	A-579B	7722

7590 07/26/2004

M. PAUL BARKER, ESQ  
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
1300 I STREET  
WASHINGTON, DC 20005-3315

EXAMINER
----------

OUSPENSKI, ILIA I

ART UNIT	PAPER NUMBER
----------	--------------

1644

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/890,729

Applicant(s)

YOSHINAGA, STEVEN KIYOSHI

Examiner

ILIA OUSPENSKI

Art Unit

1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-31 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

1. Claims 1 – 31 are pending.

2. The following is noted:

Dependent claims 5 – 7 recite the host cell of claim 3, whereas claim 3 contains no recitation of a host cell. For examination purposes, it is assumed that claims 5 – 7 were intended to depend on claim 4.

It is also noted that dependent claim 14 appears to have been intended to depend on claim 13 rather than claim 11, and will be interpreted as such in the instant Action.

It is further noted that dependent claim 4 appears to have been intended to depend on claim 3 rather than claim 2.

### ***Restriction***

3. The following is noted:

The claims encompass nucleic acids, polypeptides, antibodies and methods related to CRP1 and B7RP1 proteins, which differ with respect to their structure and mode of action.

Therefore, the restriction has been set forth for each as separate groups, irrespective of the format of the claims.

4. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

Art Unit: 1644

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted:

I. Claims 1 and 3 – 7, drawn to nucleic acid molecules encoding CRP1, host cells comprising the nucleic acid, and a process of producing a polypeptide by using the host cells.

II. Claims 2 – 7, drawn to nucleic acid molecules encoding B7RP1, host cells comprising the nucleic acid, and a process of producing a polypeptide by using the host cells.

III. Claims 8, 9, 11, and 19 – 21, drawn to CRP1 polypeptides and compositions, and derivatives.

IV. Claims 8, 10, 12, and 19 – 21, drawn to B7RP1 polypeptides and compositions, and derivatives.

V. Claims 13 – 18, drawn to antibodies to CRP1.

VI. Claims 13 – 18, drawn to antibodies to B7RP1.

VII. Claims 22 – 23, drawn to fusion polypeptides of CRP1.

VIII. Claims 22 – 23, drawn to fusion polypeptides of B7RP1.

IX. Claim 24, drawn to a method for treating, preventing or ameliorating a T cell mediated disorder by administering a CRP1 polypeptide.

X. Claim 24, drawn to a method for treating, preventing or ameliorating a T cell mediated disorder by administering a B7RP1 polypeptide.

XI. Claim 25, drawn to a method of diagnosing a T cell mediated disorder or susceptibility by determining the expression of a CRP1 polypeptide.

XII. Claim 25, drawn to a method of diagnosing a T cell mediated disorder or susceptibility by determining the expression of a B7RP1 polypeptide.

XIII. Claims 26 and 27, drawn to a method of identifying a molecule which binds to CRP1.

XIV. Claims 26 and 27, drawn to a method of identifying a molecule which binds to B7RP1.

Art Unit: 1644

XV. Claim 28, drawn to a method of regulating T cell activation or proliferation by administering a nucleic acid encoding CRP1.

XVI. Claim 28, drawn to a method of regulating T cell activation or proliferation by administering a nucleic acid encoding B7RP1.

XVII. Claim 29, drawn to a transgenic non-human mammal comprising a nucleic acid encoding CRP1.

XVIII. Claim 29, drawn to a transgenic non-human mammal comprising a nucleic acid encoding B7RP1.

XIX. Claims 30 and 31, drawn to a method of suppressing an immune response by administering an antagonist of CRP1.

XX. Claims 30 and 31, drawn to a method of suppressing an immune response by administering an antagonist of B7RP1.

5. The inventions listed as Groups I-XX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The Invention of Group I was found to have no special technical feature that defined the contribution over the prior art of US PG-PUB 20020164697.

US 20020164697 teaches SEQ ID NO:9, mouse ICOS, which is identical to SEQ ID NO:1 claimed in claim 1 of the instant application. Therefore, claim 1 is anticipated by the PG-PUB.

Since Applicant's Inventions do not contribute a special technical feature when viewed over the prior art they do not have a single general inventive concept and so lack unity of invention.

### ***Species Election***

6. Claims 20 and 21 (Inventions III and IV) recite a polypeptide comprising a “derivative” or a “water soluble polymer.” Specification discloses at least on page 48 an extensive list of derivatives and polymers. In the event that Invention III or IV is elected, and specific derivatives or polymers are introduced into the claims during prosecution, additional species election will be required.

7. Claims 24 and 25 (Inventions IX-XII) include recitations of a “T cell mediated disorder.” Specification discloses on pages 64 – 69 a number of specific disorders which are T cell mediated. In the event that an Invention from the group IX-XII is elected, and specific disorders are introduced into the claims during prosecution, additional species election will be required.

8. Claim 30 includes recitation of “antagonist” of CRP-1 or B7RP1, while dependent claim 31 discloses an antagonist which is an antibody to B7RP1. Specification discloses at least on page 64 that antagonists may be protein, carbohydrate, lipid, or small molecule. Additionally, Example 18 on pages 96 – 98 discloses CRP1-Fc and B7RP1-Fc fusion proteins as inhibitors of CRP1/BRP1 pathway. In the event that an invention of Group XIX or XX is elected, and additional “antagonists” are introduced into the claims during prosecution, further species election will be required.

9. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

Art Unit: 1644

10. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ILIA OUSPENSKI whose telephone number is 571-272-2920. The examiner can normally be reached on Monday-Friday 9 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on 571-272-0841. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ILIA OUSPENSKI

Patent Examiner

Art Unit 1644

July 16, 2004

PHILLIP GAMBEL  
PHILLIP GAMBEL, PH.D  
PRIMARY EXAMINER  
T&A CONTROL 1600  
7/16/04